SONY.

VIDEO SWITCHER
BVS-3100P
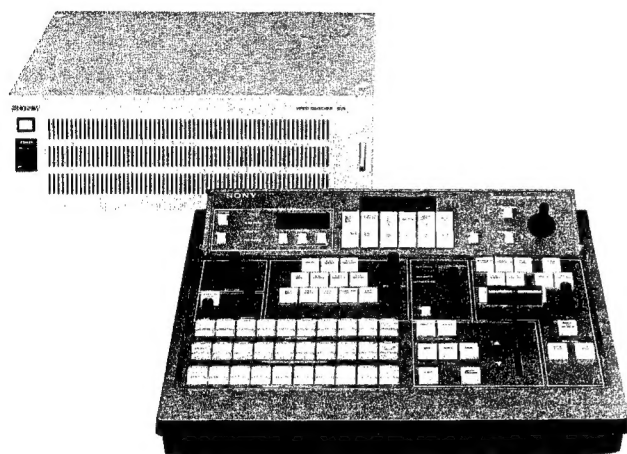
MAINTENANCE MANUAL
Volume 1 1st Edition (Revised 3)
Serial No.10001 and Higher

TABLE OF CONTENTS

SECTION 1
INSTALLATION

1-1. ENVIRONMENTAL REQUIREMENTS

. Carefully consider the air circulation of
  the place in which the unit will be
  placed to protect against temperature
  rises within the unit.
. Since the ambient temperature range for
  the set during operations is 0°C to 40°C,
  never place the unit near a heat source.

1-2. EXTERNAL DIMENSIONS

. Process unit
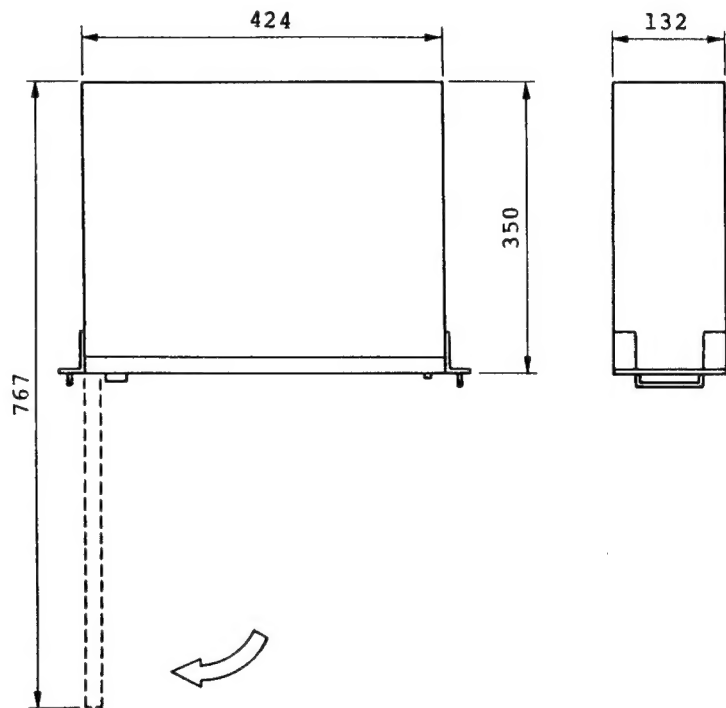
. Console unit
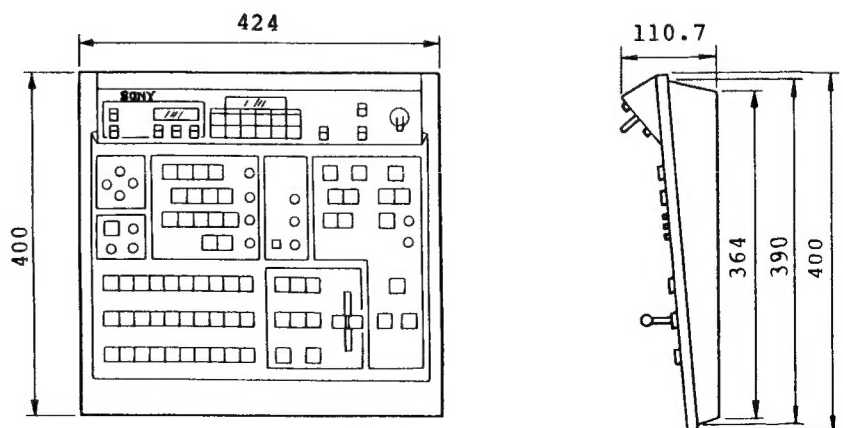
1-3. SPACE REQUIREMENTS FOR INSTALLATION

. If the unit is to be installed in a console, be sure to cut a hole in the console of the dimensions given in one of the diagrams below.

Type A

console unit

61.7 mm

hole

391 mm

415 mm

Type B

console unit

15 mm

hole

5 mm

401 mm

425 mm
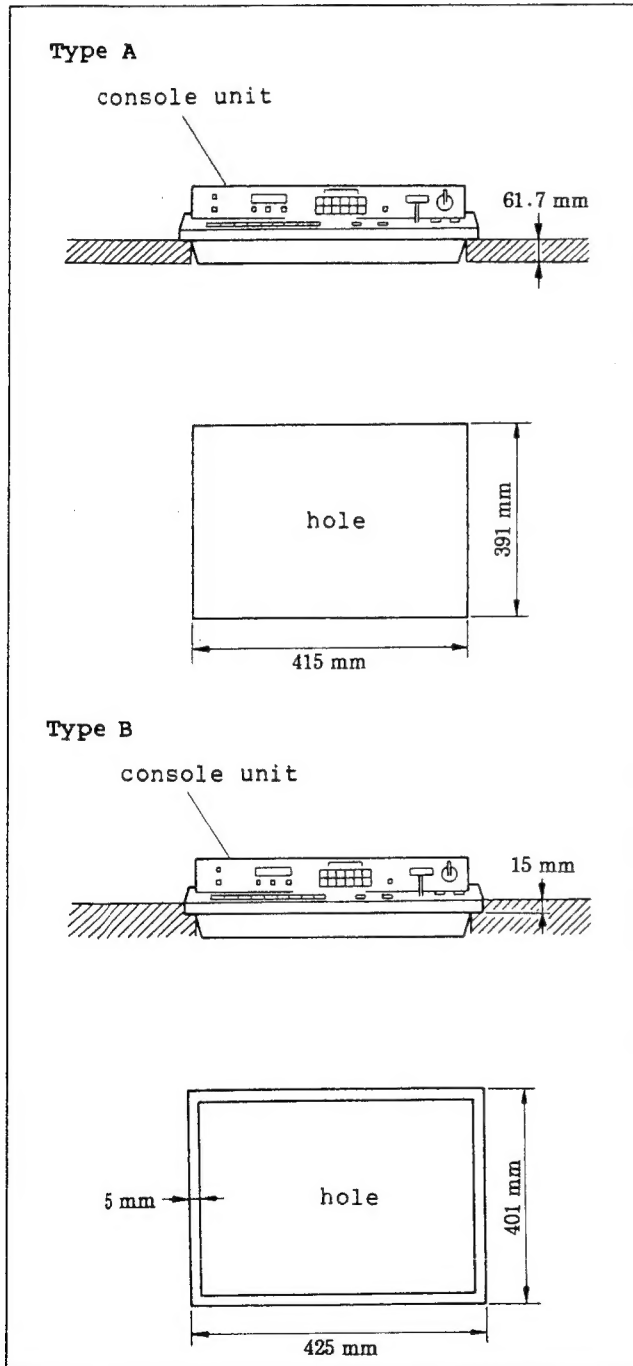
1-4. POWER SUPPLY

. Since the power supply for the BVS-3100 utilizes a switching regulator (+5V, +9.5V, +15V, and $\pm$ 9V), the unit can be operated without modification on any power supply in the 220V $\pm$ 10% range.

1-5. SETTING THE SYSTEM SELECT SWITCHES

. The select switches on all PC boards are described in the pages that follow. Since the select switches should be set according to operational requirements and the type of system desired, be sure to set them accordingly.

1-5-1. SD-19A Board

S9   S10

S5

S6 S8 S7

S4 S2
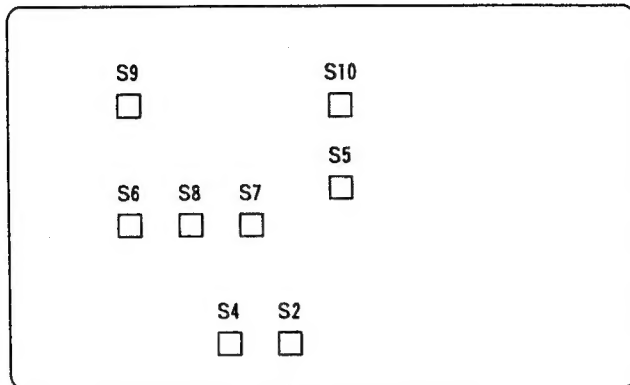
SD-19A board

. S2: BLACK BURST INT/EXT switch

EXT/INT is selected for the black burst signal and fade to black color black.

INT: The signal generated by the black burst generator within the unit is output.

EXT: Black burst signal received at GEN LOCK IN (on the connector panel) is output.

. S4: SYNC REPLACEMENT ON/OFF switch

This is the switch used to replace the SYNC burst which is used to internally generate the blanking interval of the video signal which is output from PGM OUT (on the connector panel).

ON: Replace

OFF: Not replace

Switches S2 and S4 all bear relationships with each other. The way in which they function is shown in the chart below.

		SYNC REPLACEMENT ON/OFF Switch							
		ON				OFF			
		B. B Switch				B. B Switch			
		EXT		INT		EXT		INT	
		SET UP Switch		SET UP Switch		SET UP Switch		SET UP Switch	
		ON	OFF	ON	OFF	ON	OFF	ON	OFF
SET UP (IRE)	COLOR BLACK for PRIMARY BUSES	7.5	0	7.5	0	7.5	0	7.5	0
	COLOR BLACK for FADE TO BLACK	The same as GEN LOCK IN				The same as GEN LOCK IN			
	BLACK BURST OUT 1/2/3/4								
SYNC/ BURST	PGM OUT	The same as GEN LOCK IN		The inner SYNC GEN		The same as PRIMARY VIDEO			
	PVW OUT	The same as PRIMARY VIDEO							

. S5: KEY PROCESSOR ADJ A/B switch

This switch is used when making adjustments to the key processor section.

A: during normal operations.
B: during adjustment.

. S6: BKGD COLOR ADJ ON/OFF switch

This switch is used when adjusting the chroma for the background color.

ON: during adjustment.
OFF: during normal operations.

. S7: EFFECT MATTE COLOR (OVER) ADJ ON/OFF switch

This switch is used when adjusting the chroma for the matte color (over).

ON: during adjustment.
OFF: during normal operations.

. S8: EFFECT MATTE COLOR (UNDER) ADJ ON/OFF switch

This switch is used when adjusting the chroma for the matte color (under).

ON: during adjustment.
OFF: during normal operations.

. S9: FTB ADJ/CONT switch

This switch is used when making adjustments to the fade to black section.

ADJ: during adjustment.
CONT: during normal operations.

. S10: FTB Y/(R/B) switch

This switch is used to select the conditions for replacing the blanking interval for the color difference signals.

Y: Replacement on/off is selected using S4 in the same manner as with the Y signal.

R-B: The blanking interval for the color difference signals is replaced regardless of the setting of S4.

Factory settings

SW NO.	Setting
S2	INT
S4	ON
S5	A
S6	OFF
S7	OFF
S8	OFF
S9	CONT
S10	R/B

1-5-2. SD-20 Board
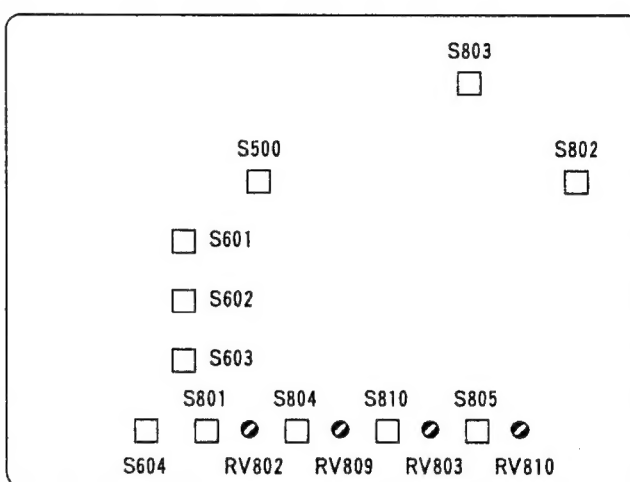
SD-20 board

. S500: DSK MATTE COLOR ADJ ON/OFF switch

This switch is used to adjust the DSK color chroma.

ON: during adjustment.
OFF: during normal operations.

. S601: CHROMA KEY DELAY select switch

This switch is used to adjust the delay for the chroma key signal.

. S602: CHROMA KEY DELAY select switch

This switch is used to adjust the delay for the chroma key signal.

. S603: CHROMA KEY DELAY select switch

This switch is used to adjust the delay for the chroma key signal.

The relationship between the switches and the delay for the chroma key signal.

The relationship between the switches and the delay
for the chroma key signal

○: ON

Delay nsec	S601								S602								S603					
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6
0																					○	○
30									○	○										○		
60									○		○									○		
90									○			○								○		
120									○				○							○		
150									○					○						○		
180									○						○					○		
210									○							○				○		
240									○								○			○		
270									○									○		○		
300									○										○	○		
330	○	○					○			○										○		
360	○	○					○				○									○		
390	○	○					○					○								○		
420	○	○					○						○							○		
450	○	○					○							○						○		
480	○	○					○								○					○		
510	○	○					○									○				○		
530	○	○	○	○				○		○										○		
540	○	○					○										○			○		
560	○	○	○	○				○			○									○		
570	○	○					○											○		○		
590	○	○	○	○				○				○								○		
600	○	○					○												○	○		
620	○	○	○	○				○					○							○		
650	○	○	○	○				○						○						○		
680	○	○	○	○				○							○					○		
710	○	○	○	○			○									○				○		
740	○	○	○	○			○										○			○		
770	○	○	○	○				○										○		○		
800	○	○	○	○				○											○	○		
830	○	○	○	○	○	○				○										○		
860	○	○	○	○	○	○					○									○		
890	○	○	○	○	○	○						○								○		
920	○	○	○	○	○	○							○							○		
950	○	○	○	○	○	○								○						○		
980	○	○	○	○	○	○									○					○		
1010	○	○	○	○	○	○										○				○		
1040	○	○	○	○	○	○											○			○		
1070	○	○	○	○	○	○												○		○		
1100	○	○	○	○	○	○													○	○		

. S604: CRK, Y-R, and B/RGB select switch
This is the switch used to select the chroma key input.

. S801: SYNC GEN LOCK SC PHASE 0°/180° switch
RV802: SYNC GEN LOCK SC PHASE FINE volume control
These are the switch and the volume control for aligning the SC phi phase of the SYNC GEN LOCK signal of the main unit with the standard signal received from GEN LOCK IN. Make rough adjustments (0° to 180°) using S801, and make fine adjustments using S802.

. S802: CABLE COMP ON/OFF switch
This is the switch used when compensating for the length of the cable being used. The gain for the input signal (the GEN LOCK signal) rises by about 6dB when this switch is set to on.

. S803: V BLANKING WIDTH select switch
The V blanking width can be set to 19H, 20H, or 21H depending on the position this switch is set to.

. S804: SYNC GEN LOCK H PHASE COARSE switch
RV809: SYNC GEN LOCK H PHASE FINE volume control
These are the switch and the volume control for aligning the horizontal SYNC phase of the SYNC GEN LOCK signal of the main unit with the standard signal received from GEN LOCK IN. Make rough adjustments using S804, and make fine adjustments using S809. Since S804 is a 16 step rotary switch, the phase can be adjusted by approximately 220nsec per step.

. S805: AUX. BLACK BURST H PHASE COARSE switch

RV810: AUX. BLACK BURST H PHASE FINE volume control
These are the switch and the volume control for aligning the horizontal SYNC phase of the standard signal sent to the SONY Digital Multi Effecter DME-450. Make rough adjustments using S805, and make fine adjustments using S810. Since S805 is a 16 step rotary switch, the phase can be adjusted by approximately 70nsec per step.

. S810: AUX. BLACK BURST SC PHASE 0°/180° switch
RV803: AUX. BLACK BURST SC PHASE FINE volume control
These are the switch and the volume control for aligning the SC phi phase of the standard signal sent to the SONY Digital Multi Effecter DME-450. Make rough adjustments (0° to 180°) using S810, and make fine adjustments using RV803.
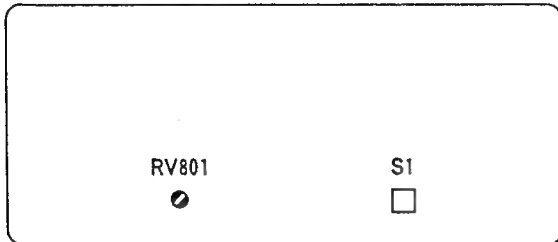
Factory Settings

SW NO.	Setting		SW NO.	Setting	
S500	OFF		S603	1	OFF
S601	1 OFF			2	OFF
	2 OFF			3	OFF
	3 OFF			4	OFF
	4 OFF			5	ON
	5 OFF			6	ON
	6 OFF		S604	RGB	
	7 OFF		S801	0	
	8 OFF		S802	OFF	
S602	1 OFF		S803	20	
	2 OFF		S804	0	
	3 OFF		S805	0	
	4 OFF		S810	0	
	5 OFF				
	6 OFF				
	7 OFF				
	8 OFF				

1-6

1-5-3. DUS-312 Board

DUS-312 board

. S1: Input V(B)S/V(B) switch

    This is the switch used to seltect the primary input video signal.

    V(B)S: selects the video signal with SYNC.

    V(B): selects the video signal without SYNC.

RV801: Blanking level bolume control

    The blanking interval for the video signal output from PGM OUT (on the connector panel) is replaced when S4 on the SD-19A board is set to on.

Factory setting

SW NO.	Setting
S1	V(B)S

1-6. CONNECTOR INPUT/OUTPUT

1-6-1. Processor

. VIDEO IN 1 to 8 connectors

    BNC connector; bridge-through output terminals.

. EXT VIDEO IN 1 connector

    BNC connector; bridge-through output terminal.

. EXT VIDEO IN 2 connector

    BNC connector; bridge-through output terminal.

. DSK EXT VIDEO IN connector

    BNC connector; terminated in 75 Ohms.

. CHROMA KEY IN connector

    BNC connector; terminated in 75 Ohms.

. EXT KEY 1 IN and EXT KEY 2 IN connectors

    BNC connector; bridge-through output terminal.

. EXT KEY MASK IN connector

    BNC connector; terminated in 75 Ohms.

. DSK EXT KEY IN connector

    BNC connector; terminated in 75 Ohms.

. BLACK BURST OUT 1, 2, 3, and 4 connectors

    BNC connector.

. GEN LOCK IN connector

    BNC connector; bridge-through output terminal.

. PVW OUT connector

    BNC connector.

. PGM OUT 1 and 2 connectors

    BNC connector.

. AUX BB OUT connector

    BNC connector.

. KEY 1 BUS OUT connector

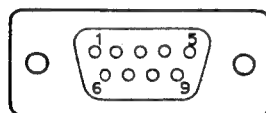   BNC connector.

. DME-450/450P

DME-450/450P (D-SUB 9 pins)
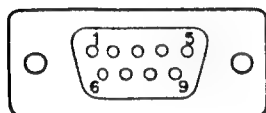
- EXT VIEW -

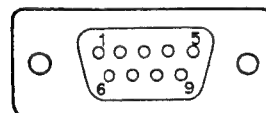| PIN NO.	Pin Name	Description
1	GND	Ground
2	RX-A	Data received by BVS-3100/3100P from DME-450/450P (−)
3	TX-B	Data transmitted to DME-450/450P from BVS-3100/3100P (+)
4	GND	Ground
5	———	———————————
6	GND	Ground
7	RX-B	Data received by BVS-3100/3100P from DME-450/450P (+)
8	TX-A	Data transmitted to DME-450/450P from BVS-3100/3100P (−)
9	GND	Ground

. AUX (D-SUB 9 pins)

- EXT VIEW -

PIN NO.	Pin Name
1	GND
2	TX-A
3	RX-B
4	GND
5	
6	GND
7	TX-B
8	RX-A
9	GND

. EDITOR (D-SUB 9 pins)

- EXT VIEW -

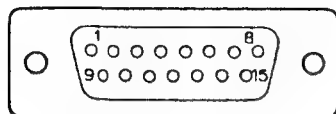| PIN NO.	Pin Name	Description
1	GND	Ground
2	TX-A	Data transmitted to Editor from BVS-3100/3100P (−)
3	RX-B	Data received by BVS-3100/3100P from Editor (+)
4	GND	Ground
5	———	———————————
6	GND	Ground
7	TX-B	Data transmitted to Editor from BVS-3100/3100P (+)
8	RX-A	Data received by BVS-3100/3100P from Editor (−)
9	GND	Ground

. CONTROL PANEL (D-SUB 25 pins)
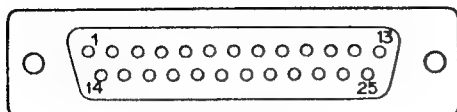
- EXT VIEW -

PIN NO.	Pin Name	Description
1	GND	Ground
2	POWER (+9.5 V)	Power supply (+9.5 V)
3	TX-A	Data transmitted to the console from the processor (−)
4	GND	Ground
5	RX-A	Data received by the processor from the console (−)
6	——	——————
7	——	——————
8	——	——————
9	FIELD PLS-A	Field Pulse (−)
10	GND	Ground
11	SHORT SENSE	Short Sense
12	POWER (GND)	Earth ground
13	POWER (GND)	Earth ground
14	POWER (+9.5 V)	Power supply (+9.5 V)
15	POWER (+9.5 V)	Power supply (+9.5 V)
16	TX-B	Data transmitted to the console from the processor (+)
17	GND	Ground
18	RX-B	Data received by the processor from the console (+)
19	——	——————
20	——	——————
21	——	——————
22	FIELD PLS-B	Field Pulse (+)
23	——	——————
24	DTR	Console connection check
25	POWER (GND)	Earth ground

. GPI (D-SUB 15P)

- EXT VIEW -

PIN NO.	Pin Name	Description
1	GPI-FADER	AUTO FADER data
2	GPI (GND)	Ground
3	GPI-DSK	DOWN STREAM KEYER MIX data
4	GPI (GND)	Ground
5	GPI-FTB	FADE TO BLACK data
6	GPI (GND)	Ground
7	GPI-SEL	Irigger fader selected at the console
8	——	——
9	——	——
10	——	——
11	——	——
12	——	——
13	——	——
14	——	——
15	GPI (GND)	Ground

. TALLY (D-SUB 25P)
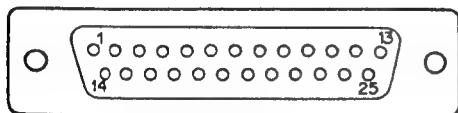
- EXT VIEW -

PIN NO.	Pin Name
1	TALLY-1
2	GND
3	TALLY-2
4	GND
5	TALLY-3
6	GND
7	TALLY-4
8	GND
9	TALLY-5
10	GND
11	TALLY-6
12	GND
13	——
14	——
15	TALLY-7
16	GND
17	TALLY-8
18	GND
19	——
20	——
21	——
22	——
23	——
24	——
25	——

1-6-2. Console Unit

CN1 (D-SUB 25 pins)
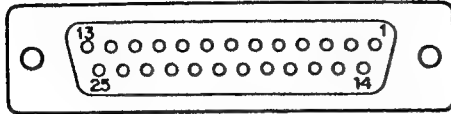
- EXT VIEW -

PIN NO.	Pin Name	Description
1	F.G.	Frame ground
2	POWER (+)	Power supply (+)
3	CONS RX-A	Data received by the console from the processor (−)
4	CONS TX-COM	Common ground for transmissions between the console and the processor
5	CONS TX-A	Data transmitted to the processor from the console (−)
6	——	——————
7	——	——————
8	——	——————
9	FIELD PLS-A	Field pulse (−)
10	FIELD PLS-COM	Field pulse common ground
11	SHORT SENSE	Short sense
12	POWER (GND)	Earth ground
13	POWER (GND)	Earth ground
14	POWER (+)	Power supply (+)
15	POWER (+)	Power supply (+)
16	CONS RX-B	Data received by the console from the processor (+)
17	CONS RX-COM	Common ground for transmissions between the processor and the console
18	CONS TX-B	Data transmitted from the console to the processor (+)
19	——	——————
20	——	——————
21	——	——————
22	FRAME PLS-B	Field pulse (+)
23	——	——————
24	DTR	Console connection check
25	POWER (GND)	Earth ground

1-7. CONNECTIONS TO THE CONNECTORS

Whenever connecting cables to the connectors on the rear panel during installation or servicing, be sure to use the following connectors or their equivalent.

1-7-1. Process Unit

Pannel Display	Connector/Parts No.
VIDEO IN 1 to 8	
EXT VIDEO IN 1	
EXT VIDEO IN 2	
DSK EXT VIDEO IN	
CHROMA KEY IN	
EXT KEY 1,2 IN	Plug, BNC 1-560-069-11
EXT KEY MASK IN	
DSK EXT KEY IN	
BLACK BURST OUT 1,2,3,4	
GEN LOCK IN	
PVW OUT	
PVW OUT 1,2	
AUX B.B OUT	
KEY 1 BUS OUT	
EVE	Connector 9P (M) 1-560-651-00
AUX	JUNCTION SHELL 9P 1-561-749-00
EDITOR	
GPI	1-564-592-11 (Accessory)
CONTROL PANEL	SWC-2505D (Accessory)
TALLY	1-564-592-11 (Accessory)

1-7-2. Console Unit

Panel Display	Connector/Parts No.
CN1	SWC-2505D (Accessory)

1-8. CONNECTIONS BETWEEN THE PROCESSOR AND THE CONSOLE

(1) Plug in the connector.
(2) Tighten the screws and affix.

process unit

console unit

CN1

① ①

② ②
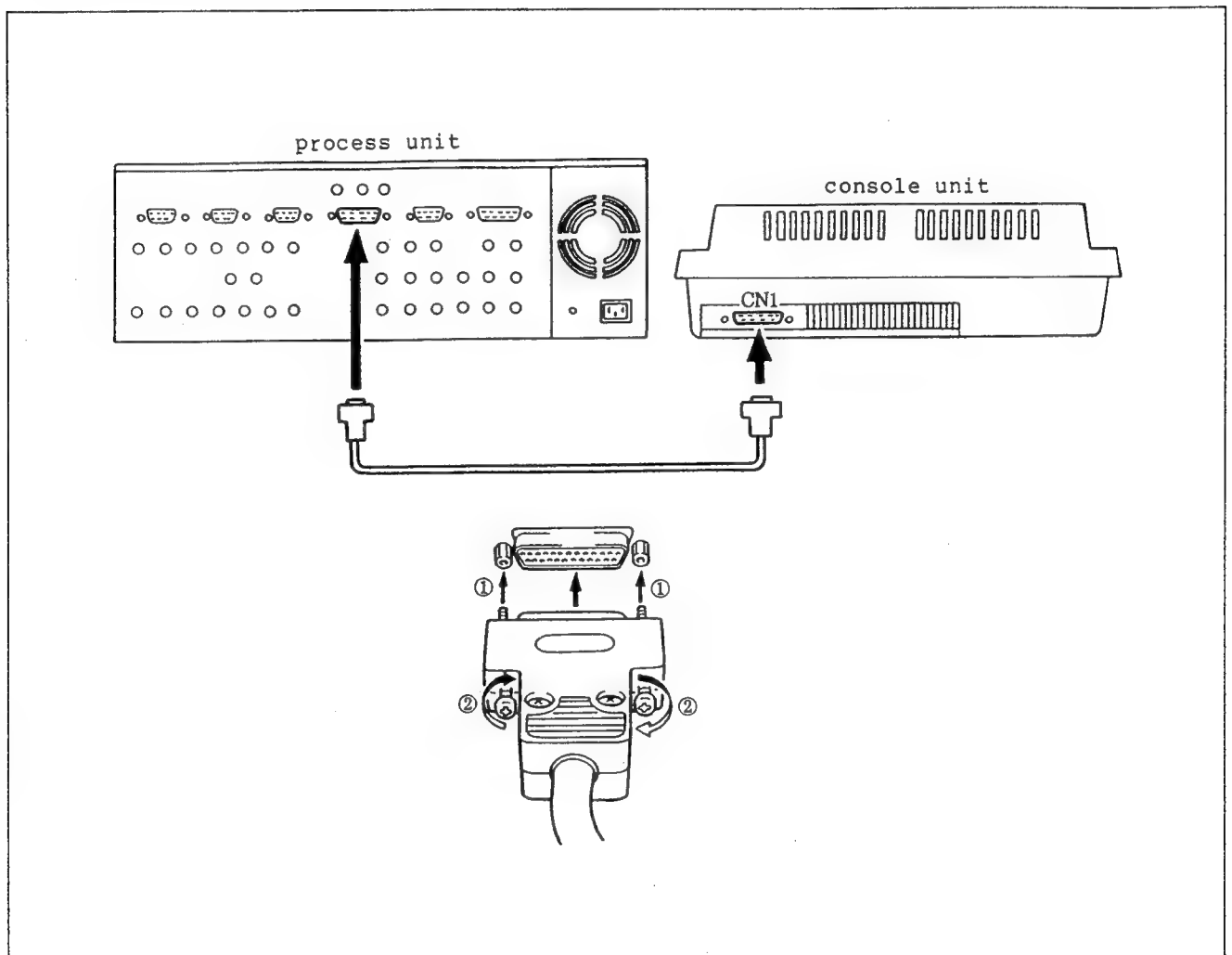
1-9. RACK MOUNTING

<Recommended parts>

Slide rails: 2 Accuride Rack Mount Slides,
Model C-213-22L or C-203-22;
slide length 26 inches.

Brackets: 4 Tokyo Metal Brackets, #816.

<Necessary equipment>

6 inner member installation screws (+B4x5)

8 plate nuts (3 holes each) (SONY part
No. 3-651-812-01)

8 bracket installation screws (1) (+B4x8)

8 bracket installation screws (2) (+B4x12)

4 rack mount screws (+RK5x16)

4 rack mount dress washers (SONY part No.
2-297-913-01)

<Rack mount procedure>

1. Remove the two screws from the left and
right panels, and attach the slide rails
with the 6 screws (+B4x5).
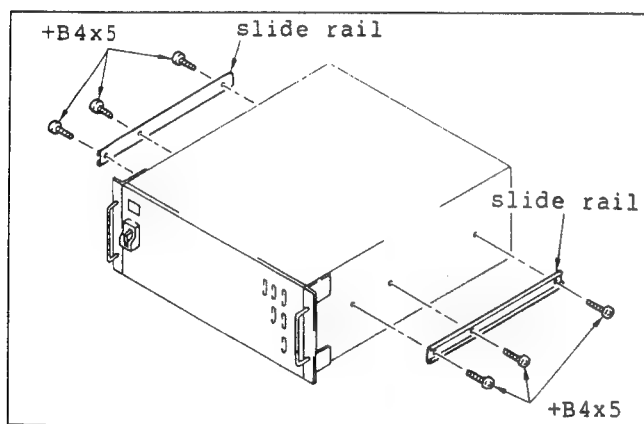
2. Attach the outer member of each slide
rail loosely to the four bracket plate
nuts (3 holes each) using the 8 screws
(+B4x8).

3. Fasten the brackets of the outer member
of each slide rail to the rack using the
plate nuts and adjust so that total
length of the slide rail from the front
end to the outside is aligned with the
inner members on the unit side.
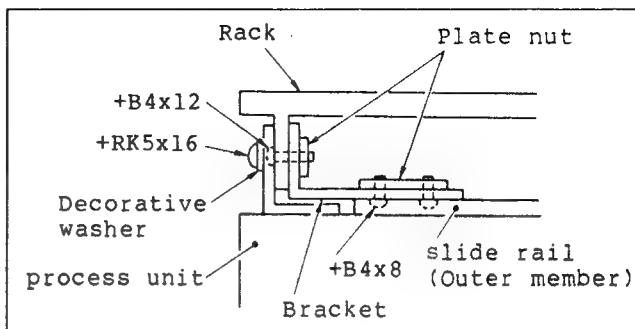
1-10. ACCESORIES SUPPLIED

. EX-201 extension board (1)
. 15 pin connector (1)
. 25 pin connector (1)
. 25 pin to 25 pin connector cord (1)
. Power supply cord (1)
. Plug holder (1)
. TIP Switch (3)
. Operation Guide Book (3)
. Operation Manual (3)
. Maintenance Manual Vol. 1 (1)
. Maintenance Manual Vol. 2 (1)
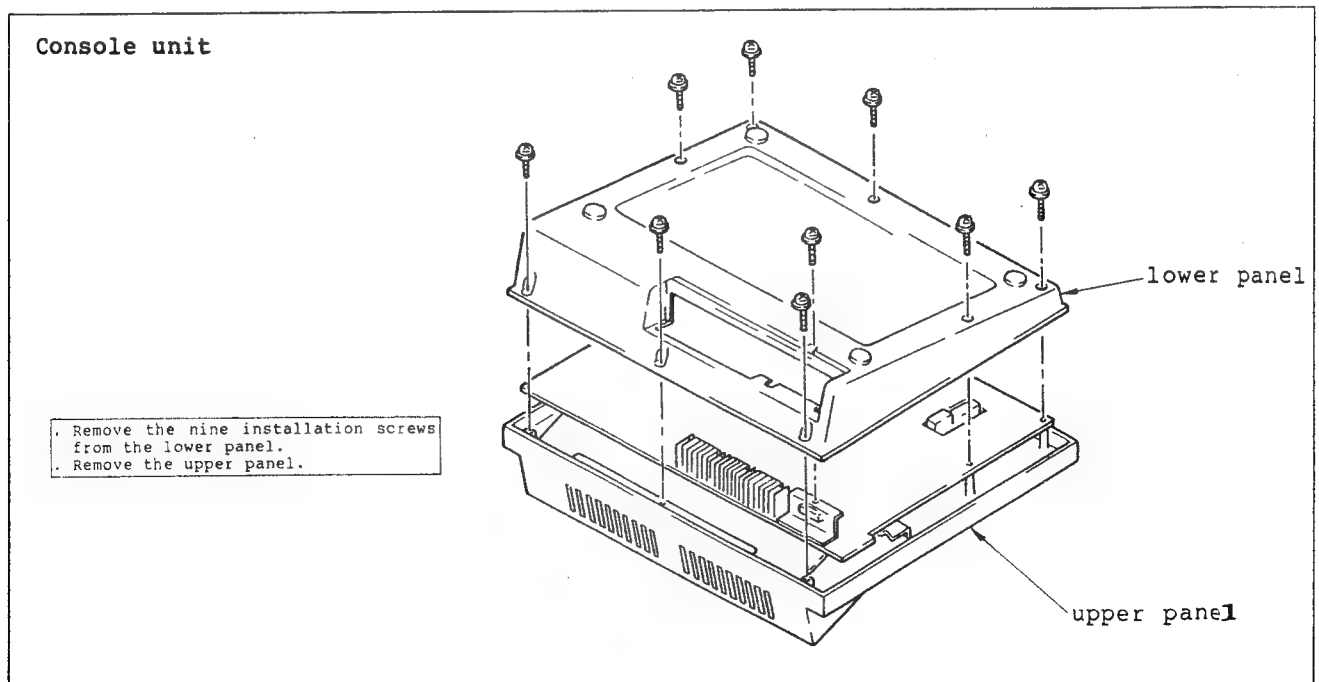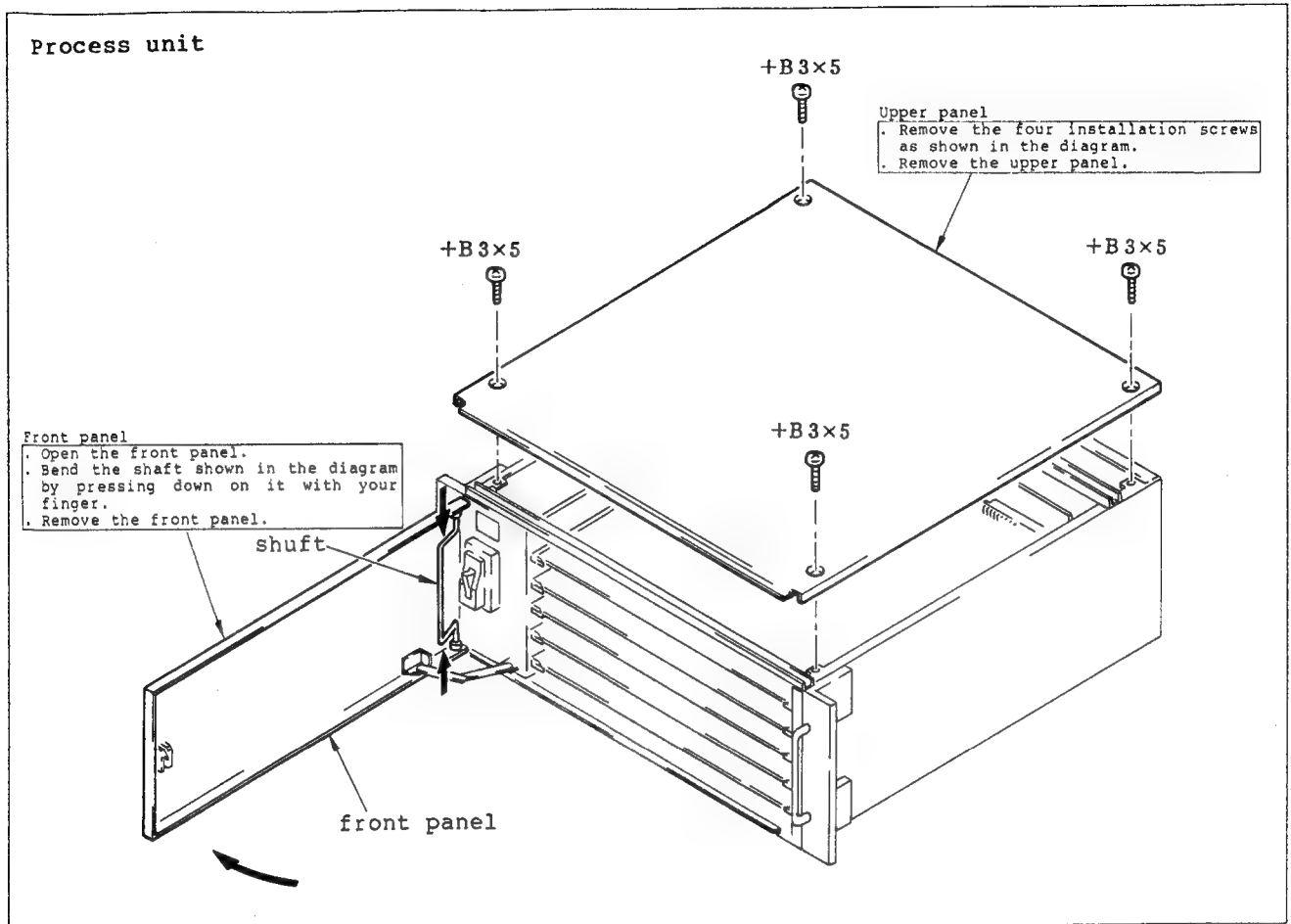
1-11. OTHER ACCESSORIES (SOLD SEPARATELY)

.SWC-2530D
This is the cable used to connect the
processor to the console.
.RMM-3000
This is the rack mount metal to fix editing
console for the console unit.

SECTION 2
SERVICE INFORMATION

2-1. REMOVING THE OUTER CABINET

Process unit

+B 3×5

Upper panel
. Remove the four installation screws
  as shown in the diagram.
. Remove the upper panel.

+B 3×5

+B 3×5

+B 3×5

Front panel
. Open the front panel.
. Bend the shaft shown in the diagram
  by pressing down on it with your
  finger.
. Remove the front panel.

shuft

front panel

Console unit

lower panel

. Remove the nine installation screws
  from the lower panel.
. Remove the upper panel.

upper panel

2-2. BOARD LOCATION DIAGRAM

2-2-1. Process Unit

Board NO.	Description
CN-289	CONNECTOR
CN-290	CONNECTOR
CN-291	CONNECTOR
EF-20E	Y (COMPOSITE) SIGNAL PROCESSOR
EX-201	EXTENSION
HN-104	MOTHER
LE-55	LED
SD-19A	SIGNAL GENERATOR FOR SIGNAL PROCESS
SD-20	SYNC GENERATOR, CHROMA KEY, DOWN STREAM KEY SIGNAL GENERATOR
SY-138	SYSTEM CONTROL
WP-27	WIPE SIGNAL GENERATOR

2-2-2. Console Unit

Board NO.	Description
KY-155A	SWITCH BOARD
KY-157	SUB SWITCH BOARD
KY-158	SUB SWITCH BOARD
LP-47	LED BOARD
LP-48	LED BOARD
LP-49	LED BOARD

2-3. CIRCUIT CONFIGURATION

2-3-1. Process Unit

<side view>

①WP-27
②SY-138
③SD-19A
④SD-20
⑤EF-20E
⑥HN-104
⑦CN-289
⑧CN-290
⑨CN-291
⑩LE-55

2-3-2. Console Unit

<upper view>

①KY-155A
②KY-157
③KY-158
④LP-47
⑤LP-48
⑥LP-49

<SY-138 board>

SY-138 board   SY-154 board
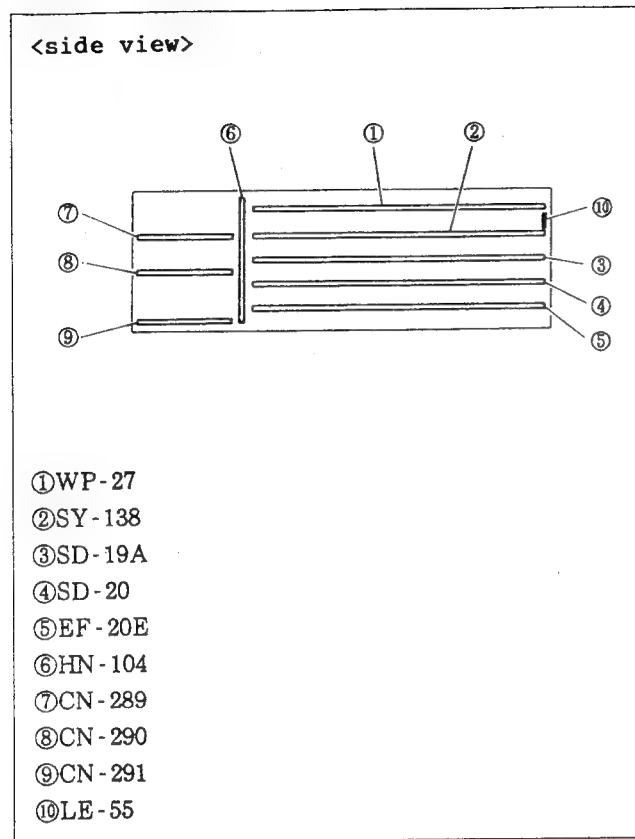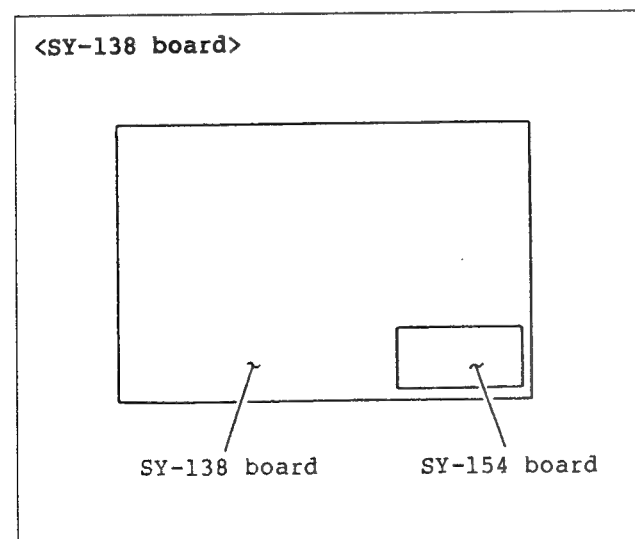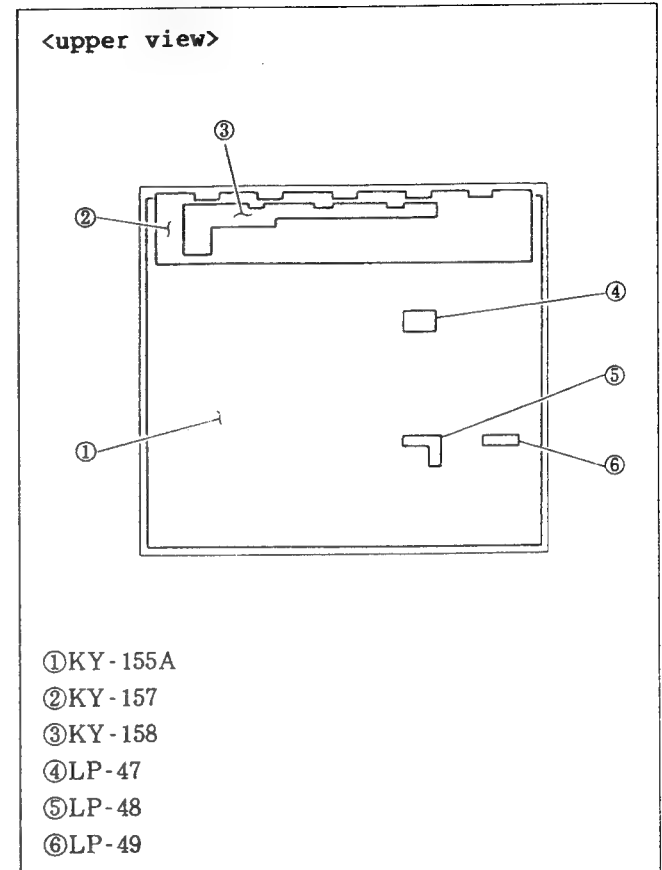
2-4. REMOVING THE BOARDS

2-4-1. Process Unit

(1) Removing/Installing the Boards (Cards)

. The boards can be removed by pushing the board levers in the direction of the * arrow and pulling the door toward yourself.

. Insert the boards parallel to the board lever guides and the board guides. The boards can be installed by closing the board levers in the direction of the ** arrow while inserting the boards into the holes in the left and right of the unit.
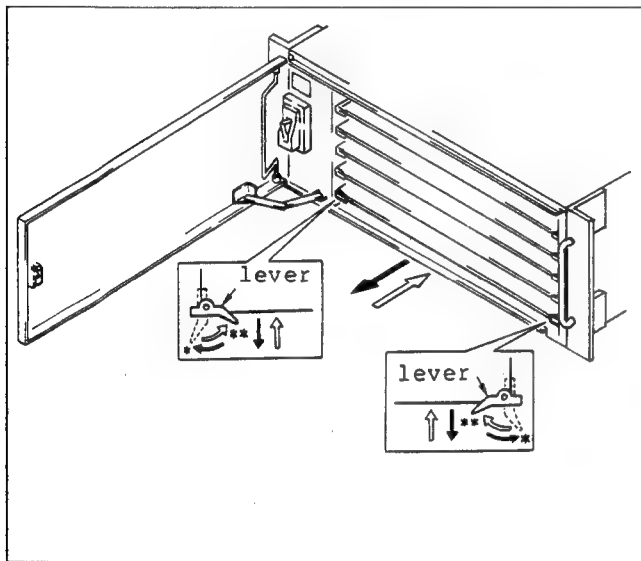
(2) Removing CN-289, CN-290 and CN-291 Board.
Remove the screws that have been attached and pull them out towards yourself.
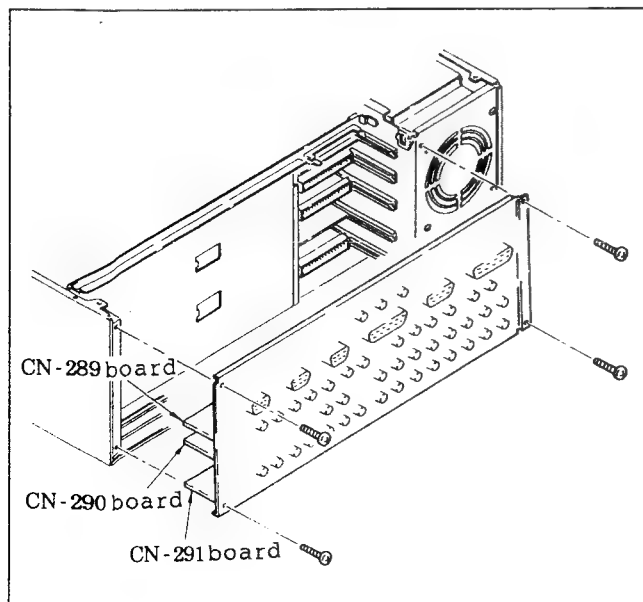
2-4-2. Console unit

(1) Remove the lower panel.
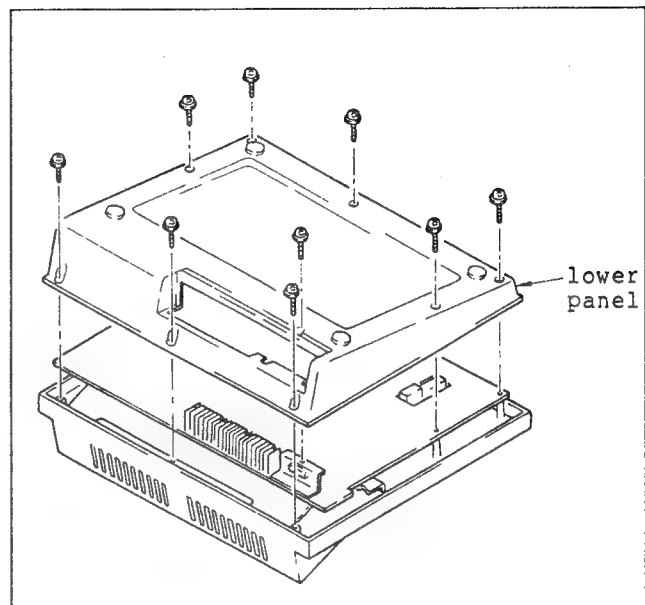
(2) Remove the Fader grip A and B, and sixteen valume knobs.

2-4
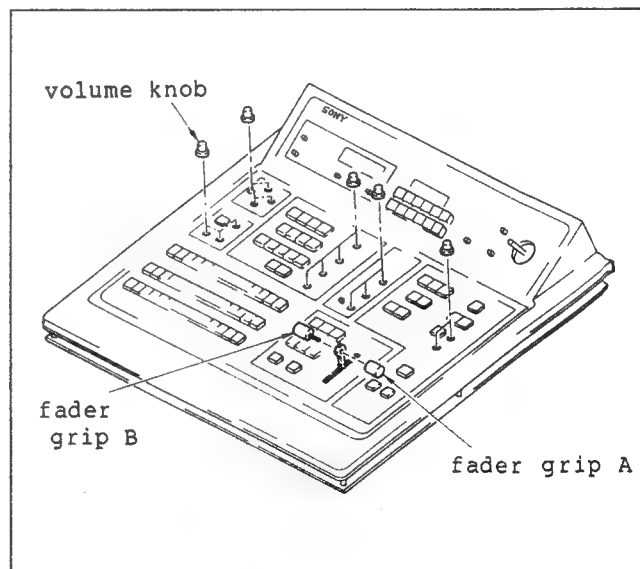
(3) Removing KY-155A Board
   Remove the two connecotrs and the screws that have been attached.
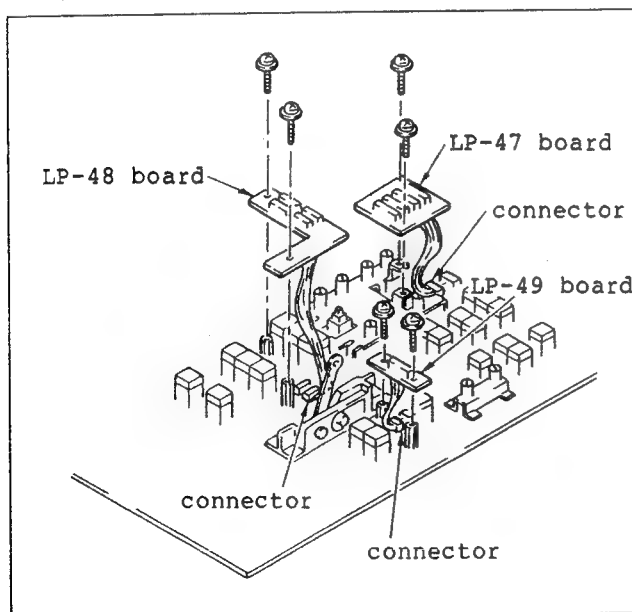   Remove the KY-155A board.

KY-155A board

connector

(4) Removing the LP-47, LP-48, LP-49 board
   Remove connecotrs, and the screws that have been attached.
   Remove the LP-47, LP-48 and LP-49 board.

LP-48 board

LP-47 board

connector

LP-49 board

connector

connector

(5) Removing KY-157 board
   Remove the brakets A and B, and screws that have been attached.
   Remove the KY-157 board.

bracket B

bracket A

KY-157 board

(6) Removing KY-158 board
   Remove the two connecotrs and scres that bave been attached.
   Remove the KY-158 board on the KY-157 board.

connector

KY-158 board

connector

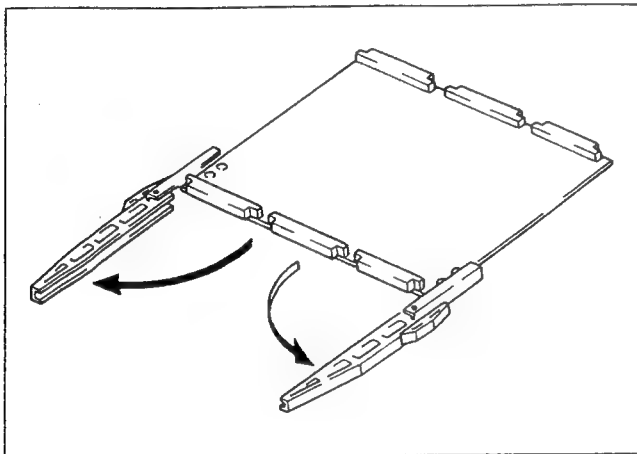KY-157 board
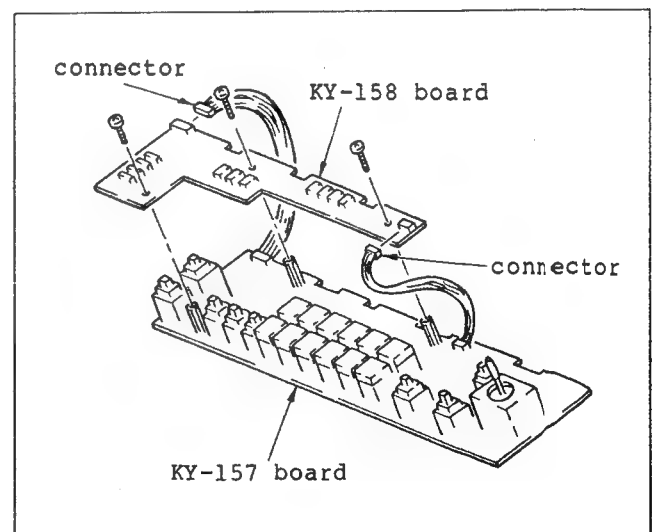
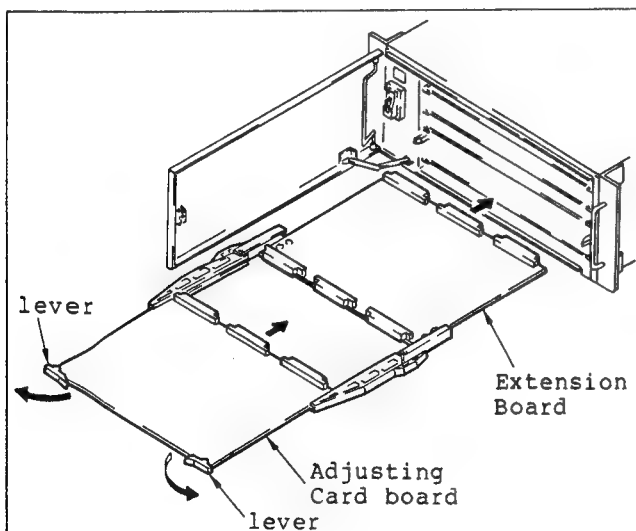## 2-5. SERVICING PROCEDURE

Extension Board; EX-201 Board
Adjusting Card Board; WP-27, SY-138, SD-19A,
                     SD-20 and EF-20E
                     Boards

(1) Open the rails for the extension board.

(2) Push the lever open towards the outside,
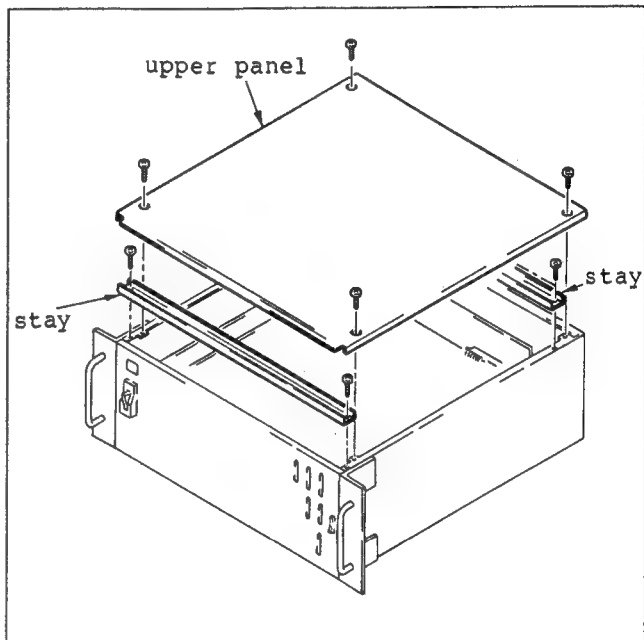   pull out the adjustment board, and push
    in the extension board.

Note) When WP-27 and SY-138 board make the
      adjustment, connect the WP-27 board
      and SY-138 board by connect cable of
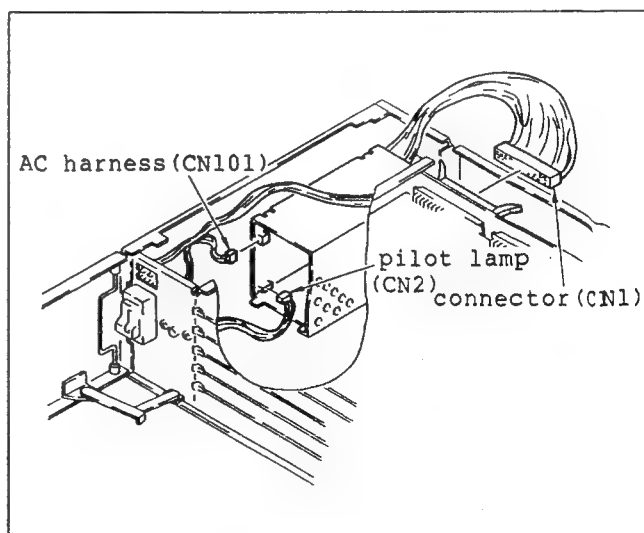   supplied accessory.

2-6. REPLACING MAIN COMPONENTS
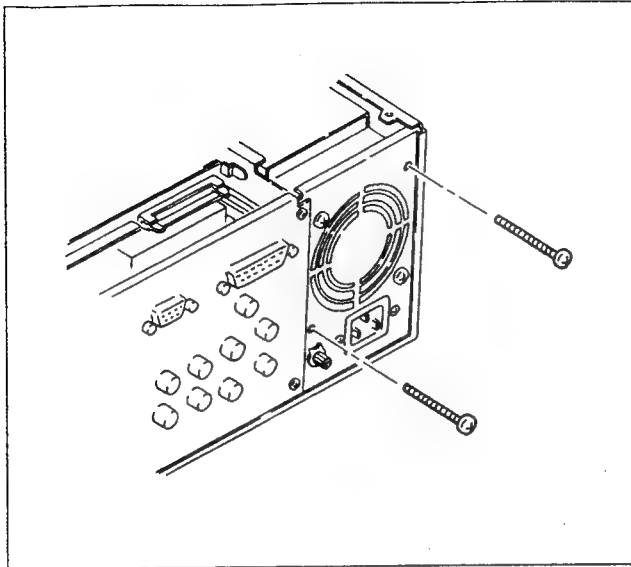
2-6-1. Processor

Removing the power supply
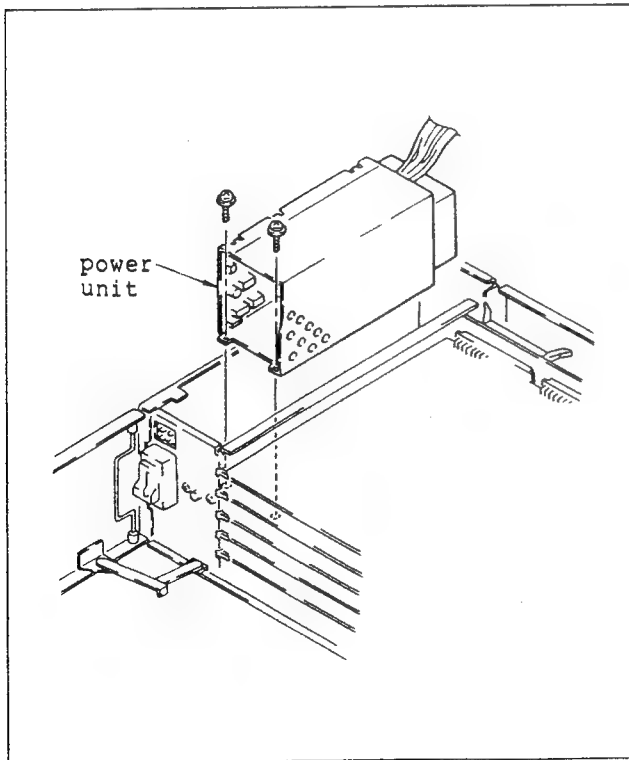(1) Remove the upper panel.
(2) Remove the stays.

(3) Remove the AC harness(CN101), the pilot
    lamp(CN205), and the connector
    (CN1).

(4) Remove the screws holding the fan to the rear panel.
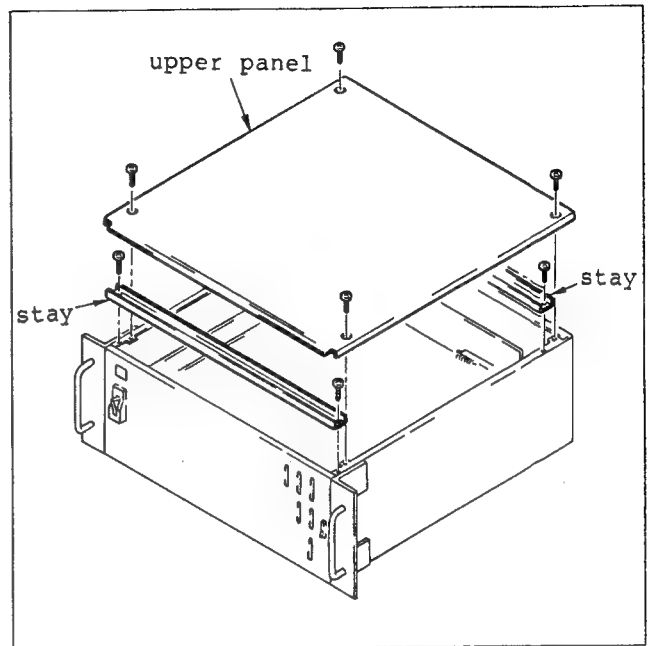

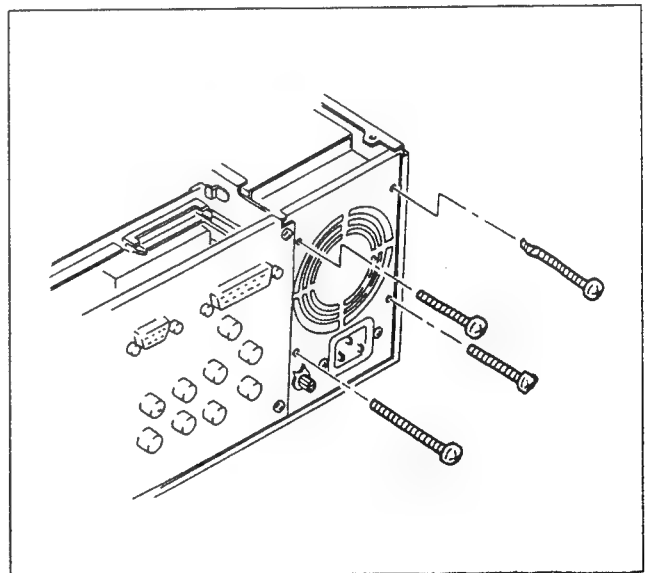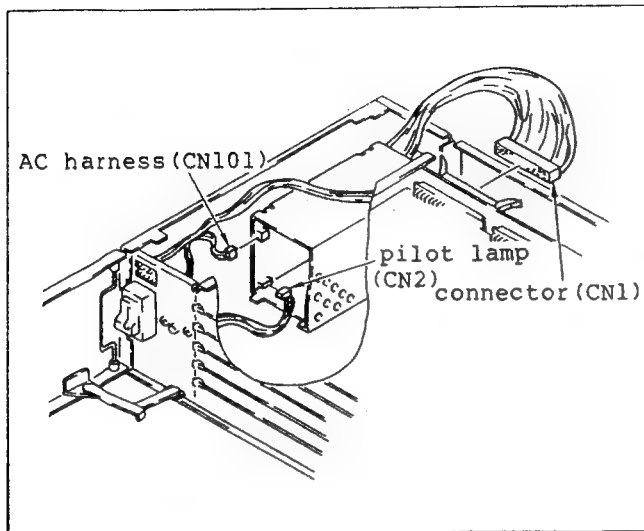(5) Remove the screws holding the power supply and then remove the power supply itself.

power unit

Replacing the fan

(1) Remove the upper panel.
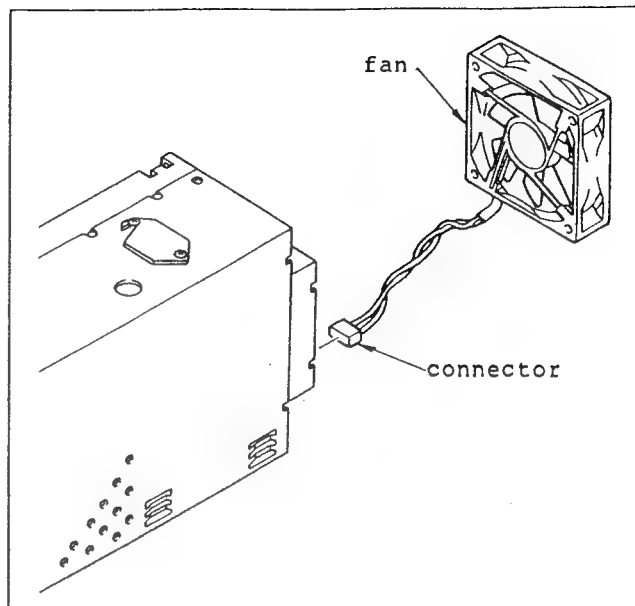
(2) Remove the stay.
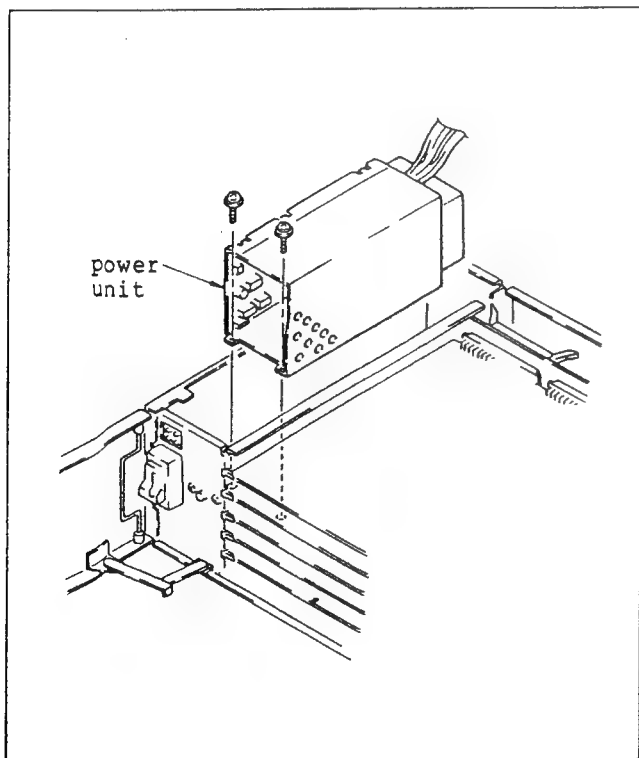

upper panel

stay

stay

(3) Remove the screws holding the fan to the rear panel.

(4) Remove the AC harness (CN101), the pilot lamp (CN2) and the connector (CN1).

(5) Remove the screws holding the power supply and then remove the power supply itself.

(6) Remove the connector and the fan.

2-6-2. Console

Replacing the fader Assy

(1) Remove the lower panel.
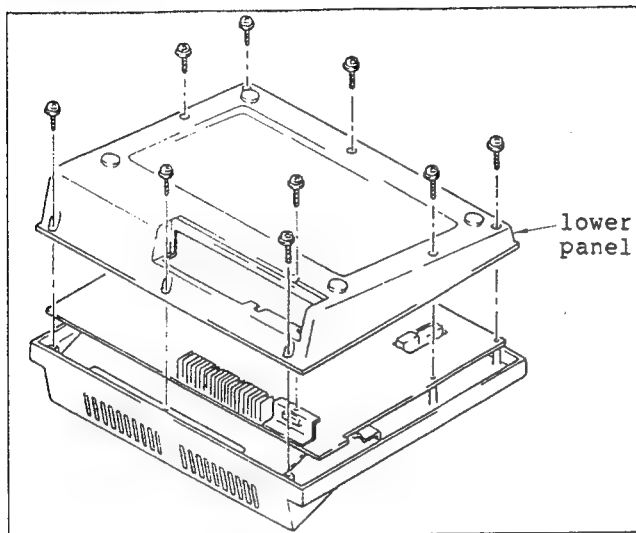
(2) Remove the fader grip A and B.
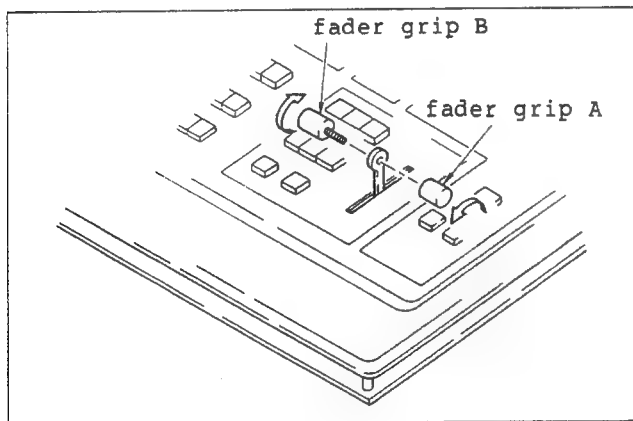
(3) Remove all 15 volume control knobs.
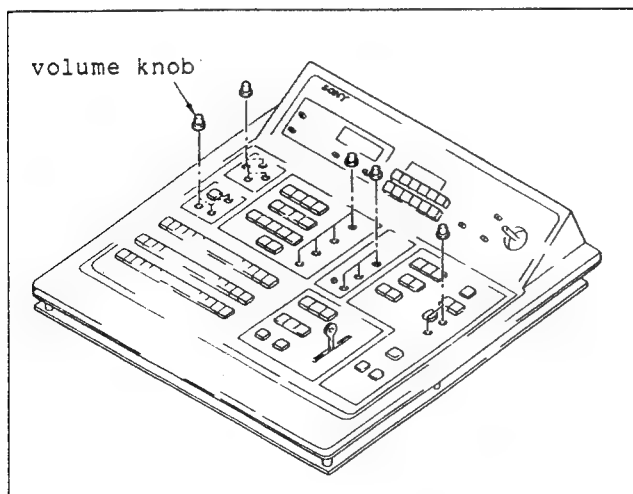
(4) Remove the two connecotrs and the screws holding the board.
Remove the KY-155A board
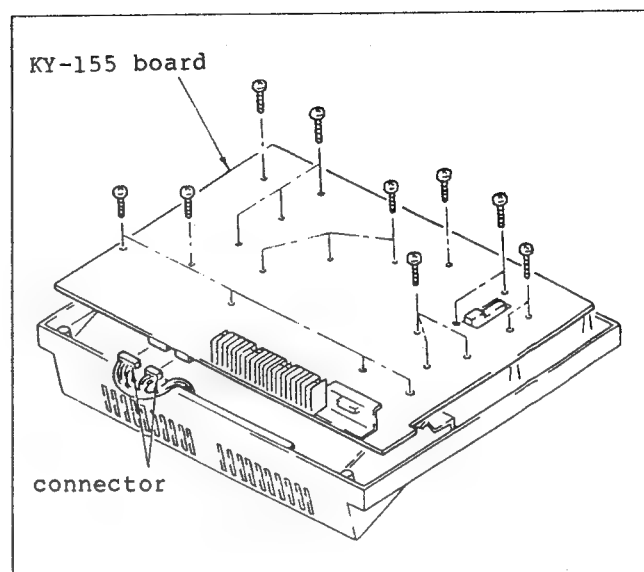
(5) Remove the connector and two screws and replace the fader Assy.
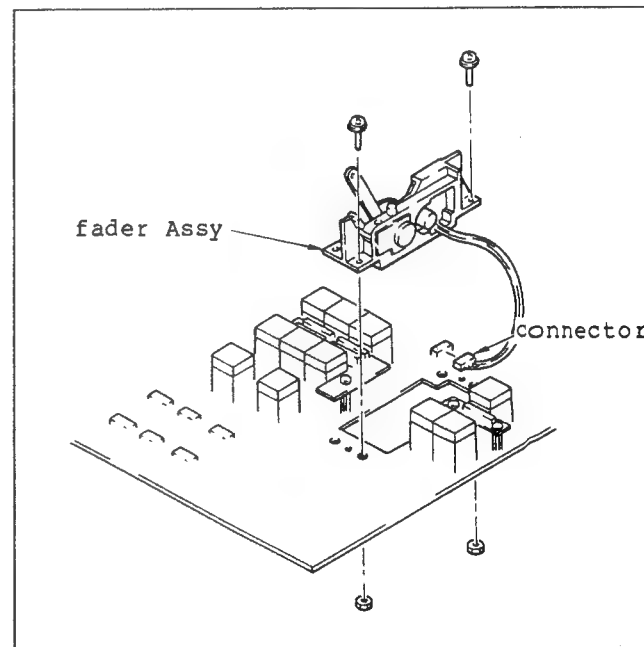
Replacing the key switch

(1) Pull out the key switches and remove its.

key switche
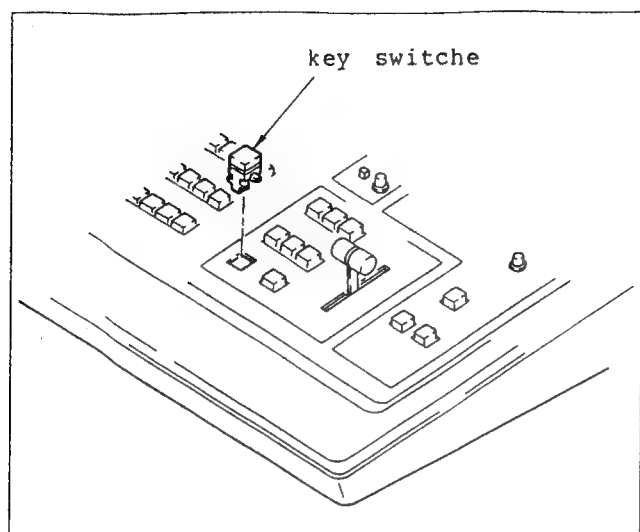
(2) The side of the switches, and pull out remove the key top.

key top
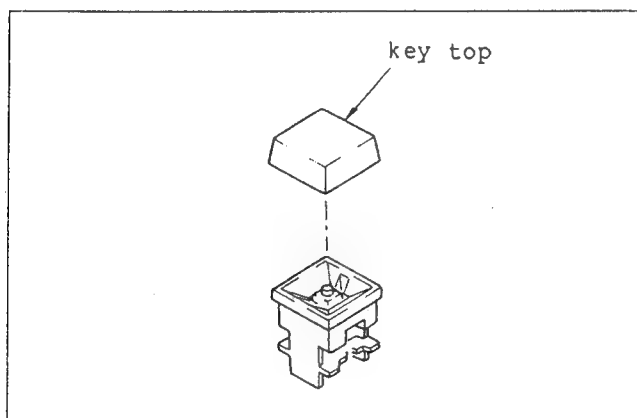
Replacing the ROM

(1) Remove the lower panel.

lower panel
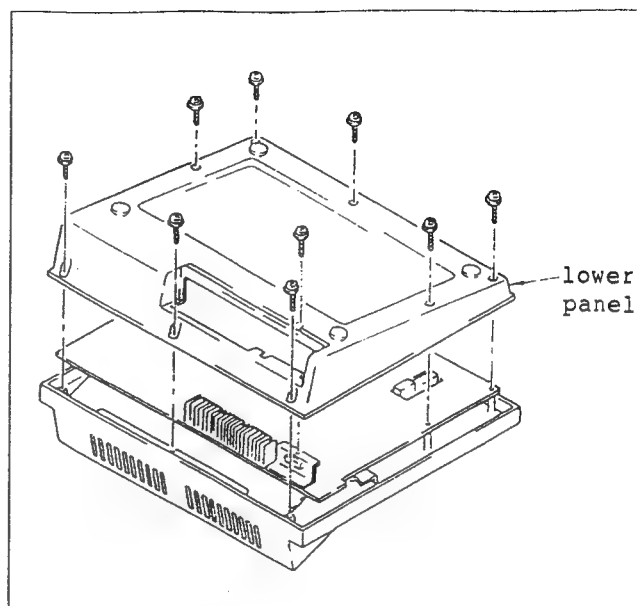
(2) Replace the ROM.

ROM
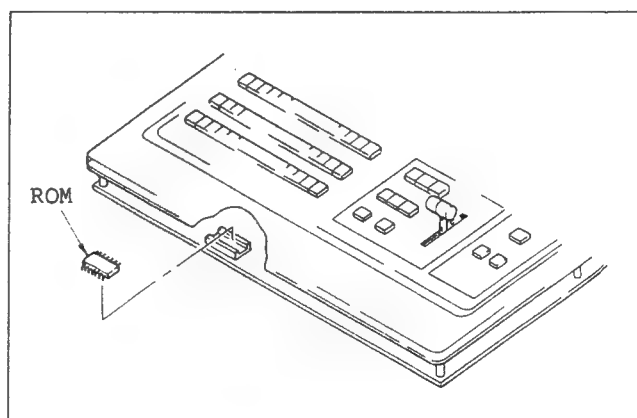
SECTION 3
TECHNICAL INFORMATION

3-1. SYSTEM BLOCK DIAGRAM

3-1-1. Example of an Editing System (Video System)
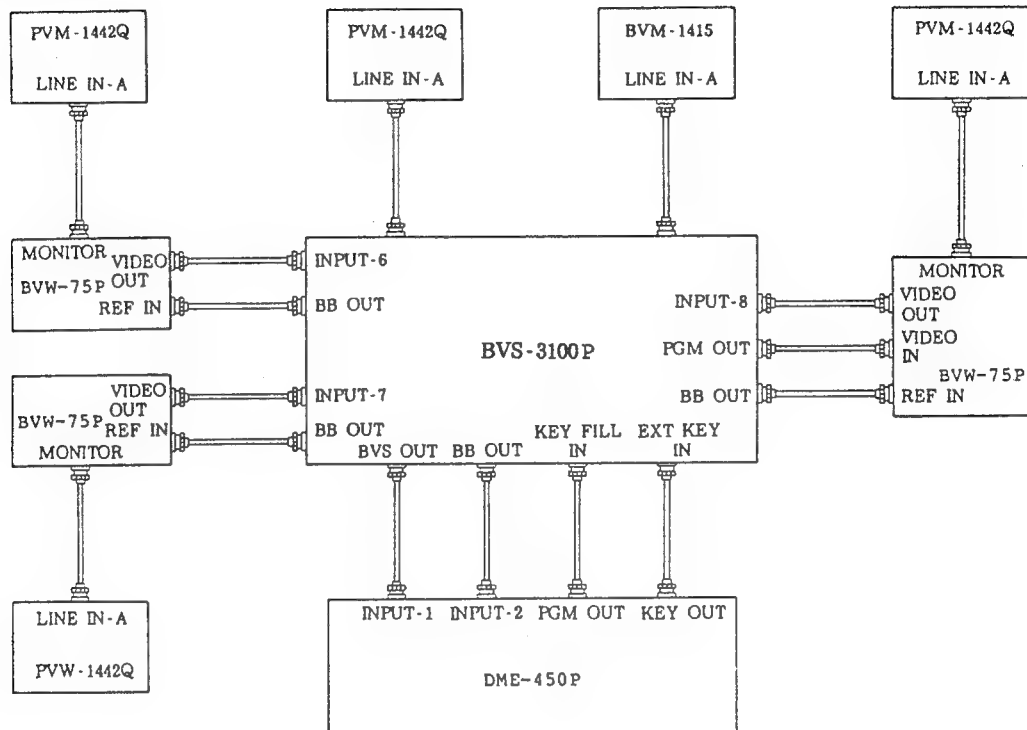
3-1-2. Example of an Editing System (Control System)

3-2. SELF-DIAGNOSTICS/STATUS

If any of the following signal numbers appear in the Auto Transition display this represents the corresponding message given.

AUTO TRANSITION DISPLAY

There are six items under the heading STATUS. (See the 3-5, 3-6)

(0) "SNAP SHOT"

This function records the status of the control panel of the BVS-3000 Series switcher and allows the information to be retrieved at any time. See the "Operator's Guide" for proper procedure.

Note: When setting the "DME-#" to "Min," be sure to set the display of the WIPE LED to "DME-#".

(1) "XPT assign"

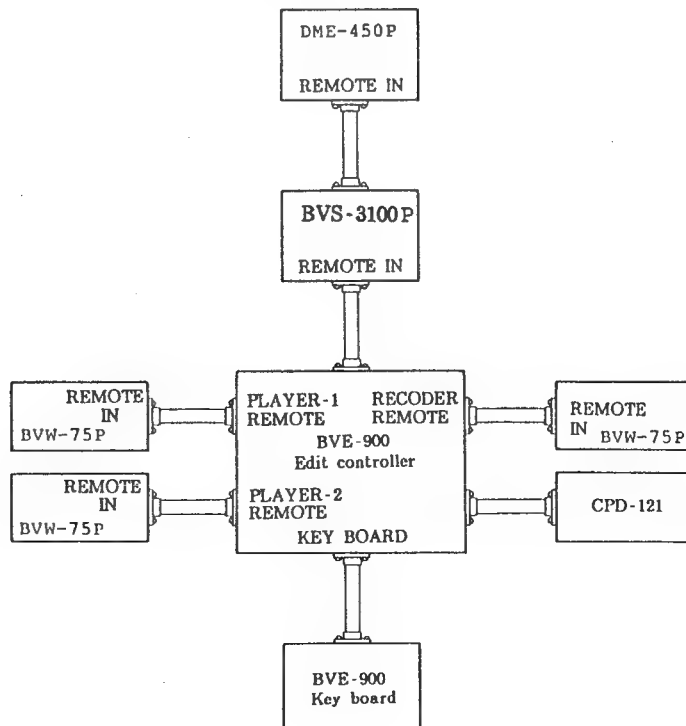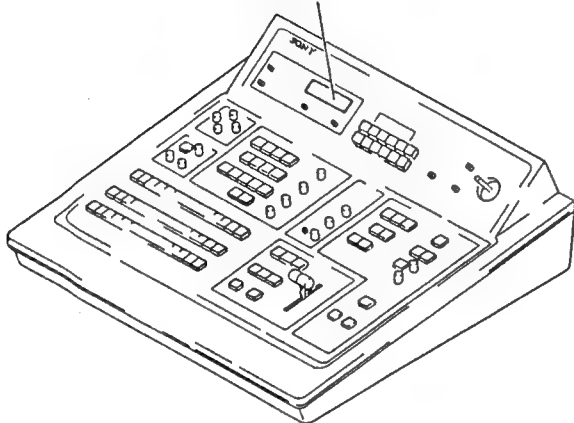This function allows the user to define the correspondence between the position of the "BUS" switches on the control panel of the BVS-3000 Series switcher and the "VIDEO IN" signal to be input to the processor. See the "Operation Guide" for proper procedure.

Note: A single switch can only be set to correspond to a single input signal. Also, all switches must be redefined whenever a setting change is made.

(2) "TALLY assign"

This function allows the user to define the correspondence between the switches on the control panel of the BVS-3000 Series switcher and the TALLY signals. See the "Operation Manual" for proper procedure.

Note: A single switch can only be set to correspond to a single port. Also, all switches must be redefined whenever a setting change is made.

(3) "setting"
"POSITION center"

In BVS-3000 Series switchers, the center of wipe patterns as well as DME-450P patterns (location during POSITIONER OFF) can be freely set.

①　Set "STATUS" to 300.

②　Display the wipe patterns with active positioners on the monitor. (Ex. 21/24/23)

③　Set the "POSITIONER" switch to "ON" and move the center of the pattern to the desired location using the joystick.

④　Set the "POSITIONER" switch to "OFF". (Setting complete.) When making pattern location settings for the DME-450P, be sure to select the proper DME-450P pattern number (Ex. #1100) in step 2 above.

"DME-450P auto setup"

"KEY" operations are executed on the BVS-3000 Series switcher side when DME-450P patterns are executed from that switcher. For this reason, SOURCE/ FILL/KEY-ON, etc., are set automatically when DME patterns are selected.

The setting parameter at this time can be freely selected.

The parameter specifies whether KEY ON is to be automatically executed when KEY-1/KEY-2/DSK/KEY-SOURCE/KEY-FILL and DME patterns are selected.

① Set "STATUS" to 301.

② Decide which "KEY" processor will execute DME patterns.

③ Set the switches/LEDs for SOURCE/ FILL/KEY-1/(KEY-2/DISK)/KEY-ON (DISK-ON). If the user does not plan to set the KEY-ON (DSK-ON) LED, only the SOURCE/FILL setting is needed.

④ Press the "CUT" switch. (Setting complete.)

Note: When making the "KEY-ON" setting during auto setup, the "TITLE" mode of DME-450P patterns can be turned "ON" by turning the KEY "CLIP" knob fully counterclockwise, or "OFF" by turning it full clockwise. In any case, normal effects can be obtained with the CLIP" knob in the center position.

(6) **"status"**

The five types of operational status possible for BVS-3000 Series switchers can be displayed in this mode.

"POWER unit emergency"

If status is normal, the LED display reads 600 when set to 6x0.

If there is a malfunction (an abnormal rise in temperature) of the power supply unit in the processor of the BVS-3000 Series switcher, the LED display will read 610 and a buzzer will sound continuously.

Be sure to quickly turn the power switch "OFF" if this display appears.

"memory backup"

If status is normal, the LED display reads 601 when set to 6x1.

If the "SNAP SHOT" memory backup power supply voltage level in the processor of the BVS-3000 Series switcher drops and the data held in memory is lost, the LED display will read 611.

All BVS-3000 Series switchers use a capacitor of high-storage capacity as a backup power supply and data can be stored for 3 to 4 weeks on a 4 hour charge. The capacitor is charged while the BVS-3000 Series switcher power is "ON".

The microcomputer in the processor automatically writes data corresponding to the initial settings to the capacitor if the data held in memory is lost.

"DME-450P control"

If the BVS-3000 Series switcher is operating indenpendently (not in control of a DME-450P), the LED display is 602 when set to 6x2.

Control (remote control) of the DME-450P is possible by setting the "EDITOR ENABLE" switch on the BVS-3000 Series switcher to "ON" and then setting the DME pattern number. The LED display will then read 612.

"asynchronous input video"

If the input video signal selected using the PGM-BUS switch of the BVS-3000 Series switcher is synchronous with respect that switcher (signal genlocked), the LED display reads 603 when set to 6x3.

If the input video signal selected with the PGM-BUS switch is either missing or asynchronous, the LED display will read 613 and the PGM-BUS switch will begin to flicker. If a synchronous input video signal is selected, the switch will stop flickering and the LED display will again return to 603.

"control panel communication"

If the status of the communication line between the control panel and the processor of the BVS-3000 Series switcher is normal, the LED display reads 604 when set to 6x4.

If communication on this line is not possible, the LED display will read 614 and a buzzer will sound continuously.

If this occurs, turn the BVS-3000 Series switcher's power off once and then back on again.

(9) "check"

"lamp check"

The lamps of the switches on the control panel of the BVS-3000 Series switcher will be lit one by one and checked when the LED display is set to 900 and then the "CUT" switch is pressed.

The status of the control panel will return to normal after the last lamp test ("DSK MIX") has been completed.

Press the "CUT" switch a second time to halt the lamp test in the middle.

"XPT-flicker"

In this mode, the crosspoint is automatically adjusted when the phase of the input video signal is aligned with that of the BVS-3000 Series switcher.

See the "Operation Manual" for proper procedure.

```
(#xxx)                (#xx)              (#x)              (memo)
0; SNAP SHOT     0: Min          0   9; reg #      "cut"; execute
                 1; MR

1; XPT assign    0   9; input #   0; (non)         "PGM"; assign

2; TALLY assign  1   8; port #    0; (non)         "PGM"; assign

3; setting       0; Min          0; POSITION       "POSITIONER"; "OFF"
                 1; MR              center

                 0; Min          1; "DME-450P"
                 1; MR             auto setup
```

	execute assign			
	"KEY ON" ; auto setup			
	"XPT" auto setup			
used KEY	FILL	SOURCE		
KEY-1	EXT VIDEO 1 SW on or EXT VIDEO 2 SW on	EFF EXT 1 SW on or EFF EXT 1 SW on	KEY-1 (NEXT-TRNS) SW on	[KEY ON] (NEXT-TRNS) LED on
KEY-2	EXT VIDEO 1 SW on or EXT VIDEO 2 SW on	EFF EXT 1 SW on or EFF EXT 1 SW on	KEY-2 (NEXT-TRNS) SW on	[KEY ON] (NEXT-TRNS) LED on
DSK	EXT VIDEO SW on	DSK EXT SW on	DSK PVW SW on	[DSK ON] LED on

CUT

(EFF TRNS) SW

6; status   0; NORM   0; POWER-unit   with "BUZZER"
                   1; EMERGENCY   emergency   &
                                                        LED flicker

                   0; NORM   1; memory backup
                   1; INITIAL
                      (empty)

                   0; NORM   2; "DME-450P"
                   1; LINK   control

                   0; SYNC (norm) 3; input synchro
                   1; other   center

                   0; NORM   4; conpane <==> mainframe   with "BUZZER"
                   1; fail   communication   &
                                                              LED flicker

9; check   0; lamp check   0; lamp check   "cut"; start/stop
                   1; XPT-flicker 0; PGM/PST-XPT   "cut"; start/stop
                                   1; EFF-KEY FILL-XPT "cut"; start/stop
                                   2; DSK-KEY FILL-XPT "cut"; start/stop